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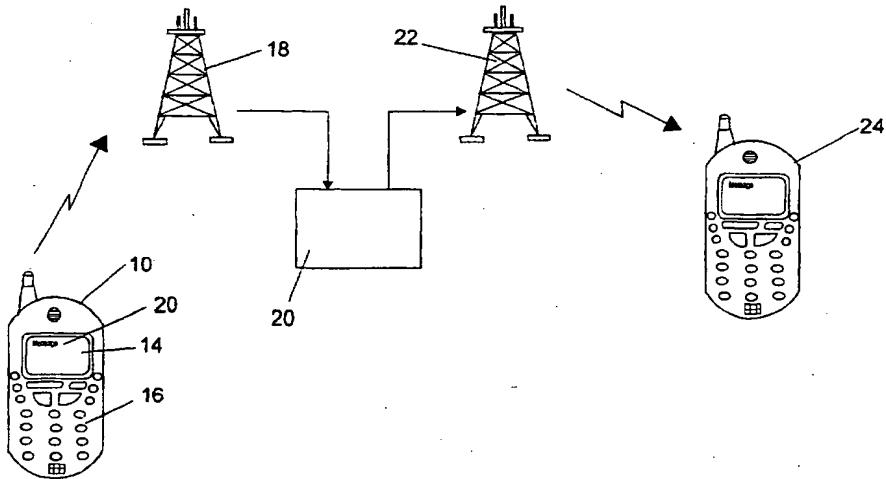
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(54) Title: IMPROVEMENTS IN MESSAGE DISPLAY



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(57) Abstract: A mobile radio handset (10, 24), capable of receiving short message service text messages (12), examines incoming text messages (12) to see if a recognised string of one or more characters is received and, in response thereto, retrieves and displays, on a display screen (14), a stored image (26, 28, 30, 32, 34) which is to be displayed whenever that string of characters is received. The image (26, 28, 30, 32, 34) can be shown alone or with the text (12) which triggered its display. The images (26, 28, 30, 32, 34) can be provided by the user of the handset (24), or derived from a server or central data base (80) in the mobile telephone network. The images (26, 28, 30, 32, 34) can include static images or animations. The static images can include a photograph. As well as text messages (12), the Caller Location Identifier (CLI) of a caller can be used to evoke a display, chosen by the call recipient. The operation of the invention is compatible with handsets (10, 24) which can receive text messages (12) but which are not enabled for the invention.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

IMPROVEMENTS IN MESSAGE DISPLAY

The present invention relates to messaging. The invention particularly relates to alphanumeric messaging in a communications environment. Most particularly, the present 5 invention relates to "text messaging" in a cellular or other radio telephone system.

Cellular radio telephones, designed primarily for duplex (two way) voice communication, are also adapted for simplex (one way) text messaging. A user types a message (using multi- 10 stroke keying on the limited button set of the mobile telephone keypad) which is displayed on the user's screen. When the user is content with the content of the text message, the message is sent to the recipient or recipients of the 15 user's choice. This is a simplex (one way) process. The text message is sent, and simply arrives. On arrival, the recipient's mobile telephone can ring (or not, as selected). In any event, the recipient is informed by sound (for example, the morse characters ... -- ...), or display of an icon, or 20 otherwise, that a "short message service" (SMS) message awaits his or her attention. When the recipient views a text message, alphanumeric and other script characters are displayed. Text messages are generally limited to having fewer than a predetermined number of characters (generally around one 25 hundred), and so great ingenuity is required to construct a text message carrying more than a trivial amount of meaning.

As well as the use of abbreviations and spelling contraction to rival those used in morse code traffic, text messagers (a 30 neologism for a sender or receiver of text messages) have, at their disposal, a number of icons to express abstract ideas. These icons are script characters, generally derived from the second part of the ASCII character set, and so take up no more 35 space than the alphanumeric characters found in the first part of the ASCII character set. Such icons can include ☺. Those

that express feeling are sometimes called EMOTICONS (emotional icons). Despite these extra symbols, the content of a text message is low and a little short on attention-getting or entertainment value. The present invention seeks to provide 5 enhanced content for text messaging while staying within the character count restraint.

According to a first aspect, the present invention consists in a method for displaying a text message, said method including 10 the steps of: identifying one or more consecutive characters in the text message string; employing said one or more consecutive characters to identify a display, and calling up and displaying the display in response to presentation of said one or more consecutive characters.

15 According to a first aspect, the present invention consists in a method for presenting script, said method including the steps of: recognising script as a pointer to display data in a database; employing said pointer to retrieve a display from the database; and 20 displaying the display in response to the script.

According to another aspect, the present invention consists in an apparatus for presenting script, said apparatus comprising: means 25 for recognising script; a database for containing display data; means to employ the recognised script as a pointer to display data in the database; means to employ said pointer to retrieve the display data from the database; and means for displaying the retrieved display in selected by the pointer.

30 The invention also provides for displaying the display in place of the script.

The invention also provides for displaying the display as well as the script.

The invention also provides that script can comprise a single character.

5 The invention also provides that the script can comprise a plurality of characters.

The invention also provides that at least some of the plurality of characters are adjacent to one another.

10 The invention further provides that the display can include a picture.

The invention further provides that the display can include an animation.

15 The invention further provides that the display can include a three dimensional construct.

20 The invention further provides that the three dimensional construct can be move to create an animated display.

The invention further provides that the database can comprise a plurality of display sets, it being selectable which display set is displayed.

25 The invention further provides that the database can obtain display data from a remote source.

30 The invention further provides that the remote source can include a server.

The invention further provides that remote source can include a camera.

The invention further provides that access to the remote source includes Internet access.

5 The invention further provides that access to the remote source includes telephone access.

The invention is further provided for use with a computer.

10 The invention further provides that the computer is connectable to an Internet service.

The invention is also provided for use with a mobile communications device.

15 The invention further provides that the mobile communications device can be a mobile telephone.

The invention further provides that script can be representative of a caller identity.

20 The invention further provides that the script can be selectable.

25 The invention further provides that display can be selectable.

The invention is further explained, by way of an example, by the following description, taken in conjunction with the appended drawings, in which:

30 Figure 1 is representative of the mobile telephone text messaging environment within which the embodiment of the invention is set.

Figure 2 shows some script characters currently used in text messaging.

5 Figure 3 shows the general components of a mobile telephone, in as much as they apply to the embodiment.

Figure 4 is a flow chart of the manner in which a modified text message can be handled.

10 Figure 5 is a flow chart showing how a modified text message can be displayed

Figure 6 is a flow chart of retrieval activities for display routines.

15 Figures 7A and 7B illustrate the environment and stages in which a display routine is retrieved from a data base.

20 Figure 8 is a flow chart showing how called identification can be used to trigger a preselected or later selected set of display routines.

Figure 9 shows how a set of display routines can be selected for a particular caller.

25 And

Figure 10A to 10G are examples of script substitutions which can be used with the present embodiment.

30 Figure 1 shows the environment within which the present invention is applied. An originating handset 10 assembles a text message 12 on its screen 14 by means of the keyboard 16. When the text message 12 is acceptable, the user of the originating handset 10 sends the text message to a receiving

base station 18 (usually the nearest base station, and the one with which the originating handset is, at that moment, registered) which transfers the text message, through the switched telephone network 20, to the transmitting base 5 station 22 with which a receiving handset 24 is registered. The receiving base station 22 transmits the text message 12 to the receiving handset 24 which receives and stores the text message 12 automatically, and then announces its act of reception for the recipient, then or later, to view the text 10 message 12.

Figure 2 shows some of the icons used in text messaging. A smiling face ☺ 26 denotes happiness. A scowling face ☹ 28 denotes unhappiness or anger. A watch ☺ 30 denotes time. An 15 envelope ☺ 32 denotes a message. A heart ♥ 36 denotes love or affection. The list is endless. Some of the icons are simple extractions from the second ASCII symbol or character set. Others are substituted by the handsets 10 24 in response to 20 particular keystrokes or data bytes. Other conventions have arisen, where a combination of punctuation characters such as “:-)” can be used, in this instance, to denote the smiley icon ☺ 26. Almost non-iconic conventions have also arisen. For 25 example CUL8R?:-) means “Can I see you later, and the idea makes me happy”. The present invention seeks to provide added utility responsively to changing conventions, both in iconic and abbreviative contexts.

Attention is drawn to Figure 3 showing a schematic diagram of the general parts in a handset 10, 24. No matter what the 30 “generation” of mobile phone 10, 24, they all have the same parts shown in Figure 3.

A radio frequency section 36 provides all the radio reception and radio transmission functions of the handset 10, 24. A 35 controller 38 sends signals for transmission to, receives

signals from, and provides operating instructions to, the radio frequency section 36. From the point of view of the present invention, it does not matter what frequency, transmission standard or other protocols the radio frequency 5 section 36 has. All that matters is that, under instruction from the controller 38, messages can be sent and received.

The controller receives user input from the keyboard 16 and sends images to be displayed on the screen 14. The controller 10 38 comprises a central processor 40, similar to that found in any personal computer. The central processor 40 operates in conjunction with Random Access Memory (RAM), Read-Only Memory (ROM) 44 and Electrically Alterable Read Only Memory (EAROM) 46. The RAM 42 is the instantly functional memory, and deals 15 with instant memory requirements. The RAM 42 loses all of its content when power is removed. The ROM 44 contains the programs and parameters which are essential for the processor 38 to function, and which never change. The ROM 44 retains its contents forever, and the contents cannot be changed. The 20 EAROM 46 contains information which is, usually, permanent, but which might be changed on very rare occasions. The EAROM 46 retains its contents when power is removed, but its contents can be changed when special signals are provided. The memories 42 44 46 are in part on the circuit board which 25 houses the controller 38, and in part (especially some ROM and EAROM) on the SIM card which is placed into a handset 10 24 and which provides portability between handsets for a user's network connections, personal preferences, phonebook etc. In addition, audio circuits 48 drive a speaker 50 and receive 30 signals from a microphone 52, and interact with the controller 38 to provide the conversational nature of the handset 10 24.

Attention is drawn to figure 4, a brief flowchart showing how the present invention is compatible with handsets 10 24 not 35 adapted for the present invention. A first operation 54 has

the handset 10 24 receive a text message. The text message consists only of normal characters, known in "ordinary" text messaging. A first test 56 checks to see if the handset 10 24 is enabled to provide the additional display, with which the 5 present invention is concerned. If the user has not enabled the additional display feature, a second operation 58 has the handset 10 24 display the text message in the normal manner. If the user has enabled the additional display feature, a third operation 60 has the handset 10 24 add the additional 10 display of the present invention. If, however, the handset 10 24 is not of a type, adapted to operate according to the present invention, the text message is simply displayed, in the normal manner.

15 Attention is drawn to figure 5 which expands upon the third operation 60 of figure 4. A fourth operation 62 has the handset 10 24 examine the text message it has just received. The user of the handset 10 24 has not yet examined (read) the text message. The fourth operation 62 looks for character 20 strings which the handset 10 24 will use as triggers for additional display, over and above the normal content of the text message. Thereafter, a fifth operation 64 calls out the display routine which is indicated by each triggering character string. A sixth operation 66 then causes the 25 provision of a respective additional display, indicated by each triggering character string, whenever the part of the text message containing the triggering character string is read.

30 Attention is drawn to Figure 6, expanding upon the fifth operation 64 of Figure 5. Entry 68 from the fourth operation 64 is to a seventh operation 70 where the handset 10 24 looks in its ROM 44 and/or its EAROM 46 to see if instructions exist to generate the additional display called out by a character 35 string in the text message. Some routines will permanently be

stored in the ROM 44. Other routines will have been acquired over time, and will have been stored in the EAROM 46. If a second test 72 detects that the appropriate routine is already stored, an eighth operation 74 generates the action 5 parameters, from the stored routine, ready to be used in the sixth operation 66 to which exit 76 is made. If the second test 72 does not detect that the required routine is stored in the ROM 44 or EAROM 46, a ninth operation 78 gets the required routine from a central server, stores the acquired required routine in the EAROM 46 for further use at a later time, and 10 passes control to the eighth operation 74 where the action parameters are generated for use in the sixth operation 66.

Attention is drawn to Figures 7A and 7B, illustrating the 15 action of the ninth operation 78 of figure 6. Lacking the required routine, in Figure 7A, the receiving handset 24 automatically puts in a call through the receiving base station 22 to a central data base 80 connected to the switched telephone network. The database 80 seeks out the required 20 routine, and, in Figure 7B, sends the required routine, back through the switched telephone network and the receiving base station 22, to the receiving handset 24. The receiving handset 24 then stores the required routine in the EAROM 46. If the 25 EAROM 46 is on the SIM card, the routine is made portable from handset 24 to handset 24 when the user changes service supplier or handset model.

While it is preferred that the transfer of the request for the required routine from the receiving handset 24, and the 30 transfer of the required routine to the receiving handset 24 are all in the space of a single automatic call, originating from the receiving handset 24, the invention also provides that the data base 80, if a delay is unavoidable, can respond to the receiving handset 24 by placing a second (non-ringing) 35 automatic call to the receiving handset 24.

Attention is drawn to Figure 8, a flowchart illustrating how a user can select what style of additional images are automatically displayed when a text message is received.

When a text message is received, a tenth operation 82 examines the CLI (Caller Location Identifier), a coded message which accompanies each call (text or voice) and which serves to indicate, to the user, the origin of the call. This feature is well known in the art. In general, the CLI is used to consult the user's stored "phone book" and to display the name of the caller. As a default, no display or number display alone can be provided. The present invention puts the CLI to a further use. The tenth operation 82 checks the CLI. If a third test 84 detects that the sender of the text message is not in the receiving handset's 24 phone book, an eleventh operation selects the standard (default) set of routines to be displayed. If the third test 84 detects that the sender of the text message is in the phone book of the receiving handset 24, a fourth test 88 checks to see if the user of the receiving handset 24 has selected a special set of routines to be used when that particular text message sender sends a text message. If the user has not selected a special set for that text message sender, the eleventh operation 86 employs the standard (default) set of routines. If the user of the receiving handset 24 has selected a special set of routines for that particular text message sender, a twelfth operation 90 retrieves the special set of routines (which may involve the operations of Figures 7A and 7B) and a thirteenth operation 92 employs the selected special set when generating additional images for use when reading the text message. Exit 94 can be to the first operation 54 of figure 4.

Figure 9 is a flow chart illustrating how the user of the receiving handset 24 can apply a special set of routines for a

particular caller (text messenger). In a fourteenth operation 96, having opened the phone book in the receiving handset 24, the user selects a particular caller from the list. In a fifteenth operation 98 the user selects a "Display Set" menu 5 and selects an appropriate set of routines. A sixteenth operation 100 then stores the identity of selected set for selection and use as illustrated with reference to Figure 8.

Figures 10A to 10B show examples of one set (usable as the 10 default set) of images which can be called up by the present invention. Within each image is an example of a character string which can call up that image. The character is a dog, holding a ball. In Figure 10A the dog is blowing kisses. In Figure 10B the dog is happy. In Figure 10C the dog is sad. In 15 Figure 10D the dog is surprised. In Figure 10E the dog is sticking out its tongue. In Figure 10F the dog is angry. In Figure 10G the dog is asleep. Other sets can have different creatures, different poses, and different call-up codes.

20 The examples, given in Figure 10, are of static images. The routines, called up, according to the invention, can equally be short animations, generated by a series of billboards, or created by movement of a three dimensional model projected for the two dimensional screen 14. The images or animations can be 25 interspersed between letters in the text message, or can be used to fill the whole or part of the screen 14 as a character string "enters stage right" or "exits stage left"

30 The user, of the receiving handset 24, in the twelfth operation 90 (of Figure 8) can specify particular or new character strings to bring up images selected by the user, and can do so with images received from the database 80. For example, if the word "Love" appears, the user can specify that an image or animation of a throbbing heart appears. If the 35 name of someone hated appears, an image of a dagger or an

animation of a stabbing, or some such instrument or action can be specified to appear. The present invention also encompasses a selected image or animation being selected for each caller, the selected image or animation being retrieved instead of 5 the caller's identity or number, so that the caller may be visually identified by the recipient, even for ordinary voice calls.

The present invention also encompasses that a user can insert 10 images or animations, not from a stock library or database, but loaded into the handset from a digital camera, or by connection to a computer, or by insertion of a specially pre-programmed or pre-loaded card.

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Claims:

1. A method for presenting script, said method including the steps of: recognising script as a pointer to display data in a database; employing said pointer to retrieve a display from the database; and displaying the display in response to the script.
2. A method, according to claim 1, including displaying said display in place of said script.
3. A method, according to claim 1, including displaying said display as well as said script.
4. A method, according to claim 1, claim 2 or claim 3, wherein said script comprises a single character.
5. A method, according to claim 1, claim 2 or claim 3, wherein said script comprises a plurality of characters.
6. A method, according to claim 5, wherein at least some of said plurality of characters are adjacent to one another.
7. A method, according to any of the preceding claims, wherein said display includes a picture.
8. A method, according to any of the preceding claims, wherein said display includes an animation.
9. A method, according to any of the preceding claims, wherein said display includes a three dimensional construct.
10. A method, according to claim 9, wherein said three dimensional construct is causable to be move to create an animated display.
11. A method, according to any of the preceding claims, wherein said database comprises a plurality of display sets, it being selectable which display set is displayed.

12. A method, according to any of the preceding claims, wherein said database is operative to obtain display data from a remote source.

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13. A method, according to claim 12, wherein said remote source includes a server.

10 14. A method, according to claim 12 or claim 13, wherein said remote source includes a camera.

15. A method, according to claim 12, 13 or 14, wherein access to said remote source includes Internet access.

15 16. A method, according to claim 12, 13, 14 or 15, wherein access to said remote source includes telephone access.

17. A method, according to any of the preceding claims, for use with a computer.

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18. A method, according to claim 17, wherein said computer is connectable to an Internet service.

25 19. A method, according to any of claims 1 to 15, for use with a mobile communications device.

20. A method, according to claim 19, wherein said mobile communications device is a mobile telephone.

30 21. A method, according to claim 19 or claim 20 wherein said script is representative of a caller identity.

22. A method, according to any of the preceding claims, wherein said script is selectable.

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23. A method, according to any of the preceding claims, wherein said display is selectable.

24. A method, according to claim 1, claim 2 or claim 3, wherein said database is within the receiving device

5 25. An apparatus for presenting script, said apparatus comprising: means for recognising script as a pointer to display data in a database; means to employ said pointer to retrieve a display image from the database; and a screen to display the display image in response to the script.

10 26. An apparatus, according to claim 25, wherein said screen is operative to display said display image in place of said script.

27. An apparatus, according to claim 25, wherein said screen is operative to display said display image as well as said script.

15 28. An apparatus, according to claim 25, claim 26 or claim 27, wherein said script comprises a single character.

20 29. An apparatus, according to claim 25, claim 26 or claim 27, wherein said script comprises a plurality of characters.

30. An apparatus, according to claim 29, wherein at least some of said plurality of characters are adjacent to one another.

25 31. An apparatus, according to any of claims 25 to 30, wherein said display image includes a picture.

32. An apparatus, according to any of claims 25 to 31, wherein said display image includes an animation.

30 33. An apparatus, according to any of claims 25 to 32, wherein said display includes a three dimensional construct.

35 34. An apparatus, according to claim 33, wherein said three dimensional construct can be move to create an animated display.

35. An apparatus, according to any of claims 25 to 34, wherein said database comprises a plurality of display sets, it being selectable which display set is displayed.

5 36. An apparatus, according to any of claims 25 to 35, wherein said database is operative to obtain display data from a remote source.

10 37. An apparatus, according to claim 36, wherein said remote source includes a server.

38. An apparatus, according to claim 36 or claim 37, wherein said remote source includes a camera.

15 39. An apparatus, according to claim 36, 37 or 38, wherein access to said remote source includes Internet access.

40. An apparatus, according to claim 36, 37, 38 or 39, wherein access to said remote source includes telephone access.

20 41. An apparatus, according to any of claims 25 to 40, for use with a computer.

25 42. An apparatus, according to claim 41, wherein said computer is connectable to an Internet service.

43. An apparatus, according to any of claims 25 to 40, for use with a mobile communications device.

30 44. An apparatus, according to claim 43, wherein said mobile communications device is a mobile telephone.

45. An apparatus, according to claim 43 or claim 44 wherein said script is representative of a caller identity.

35 46. An apparatus, according to any of claims 25 to 45, wherein said script is selectable.

47. An apparatus, according to any of claims 25 to 46, wherein said display image is selectable.

48. An apparatus, according to claim 25, claim 26 or claim 27,
5 wherein said database is within the receiving device

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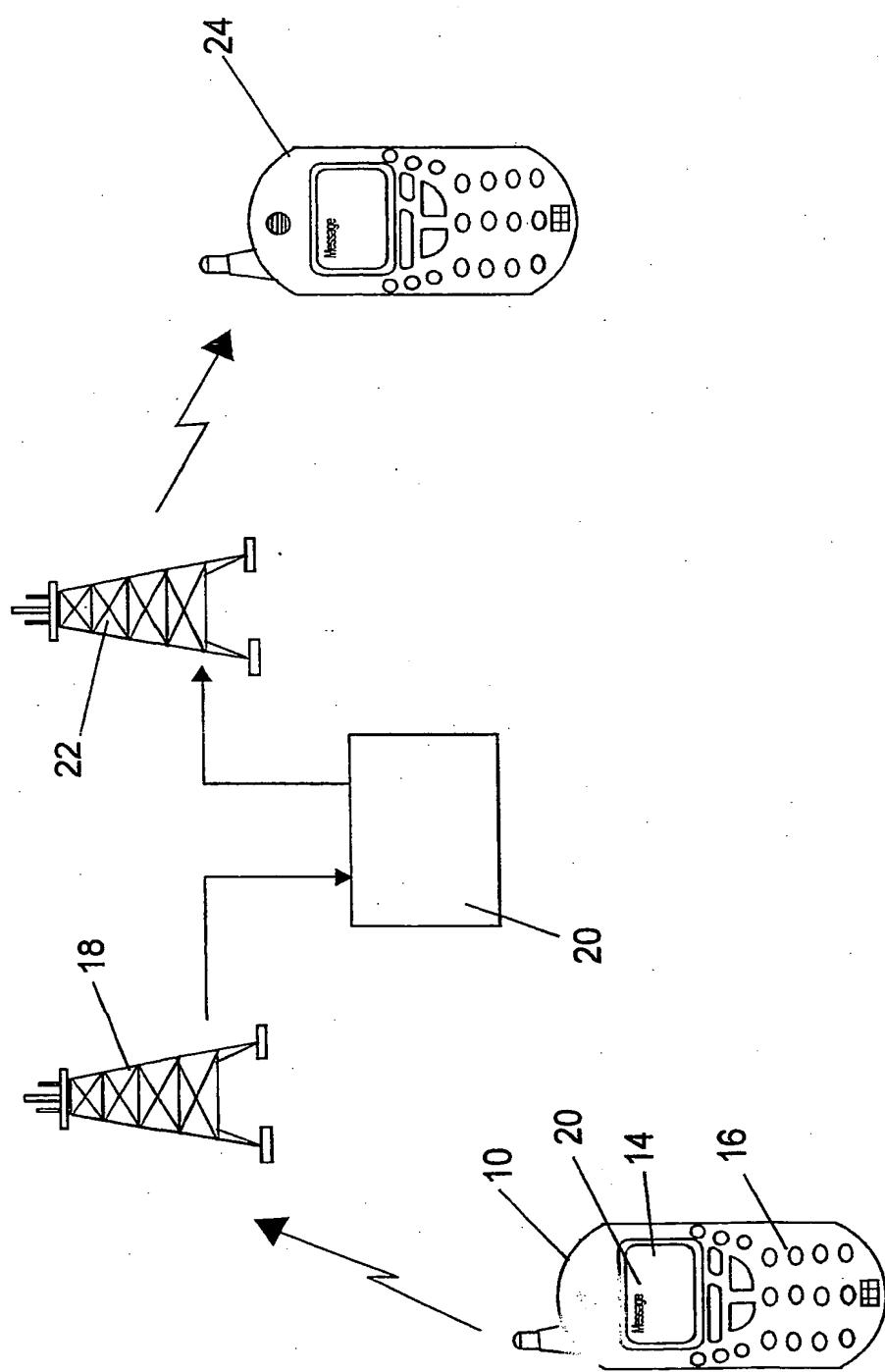


FIGURE 1

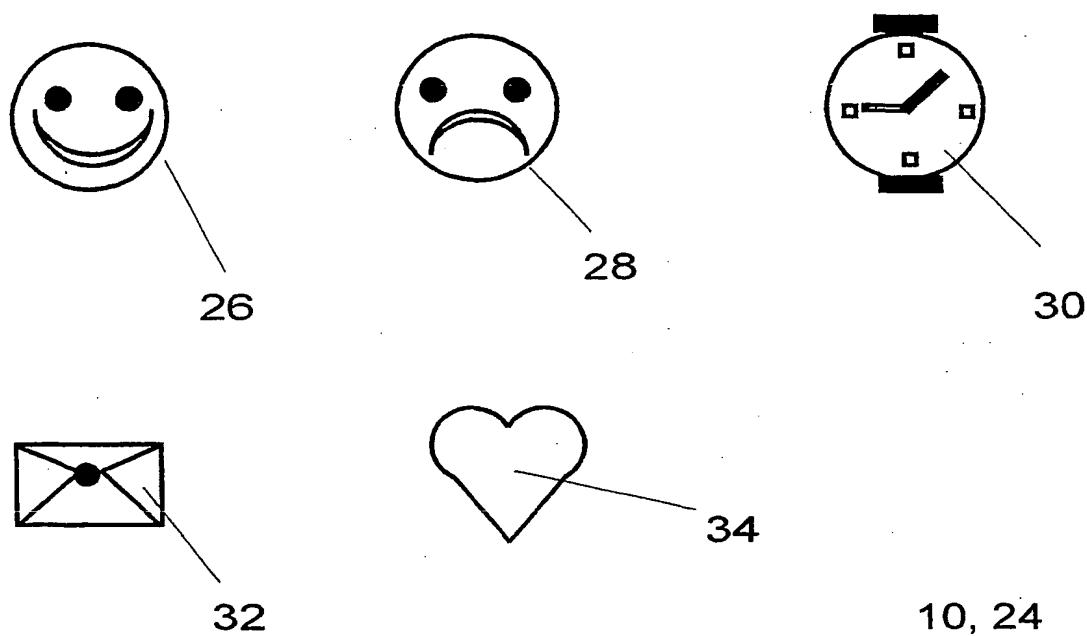


FIGURE 2

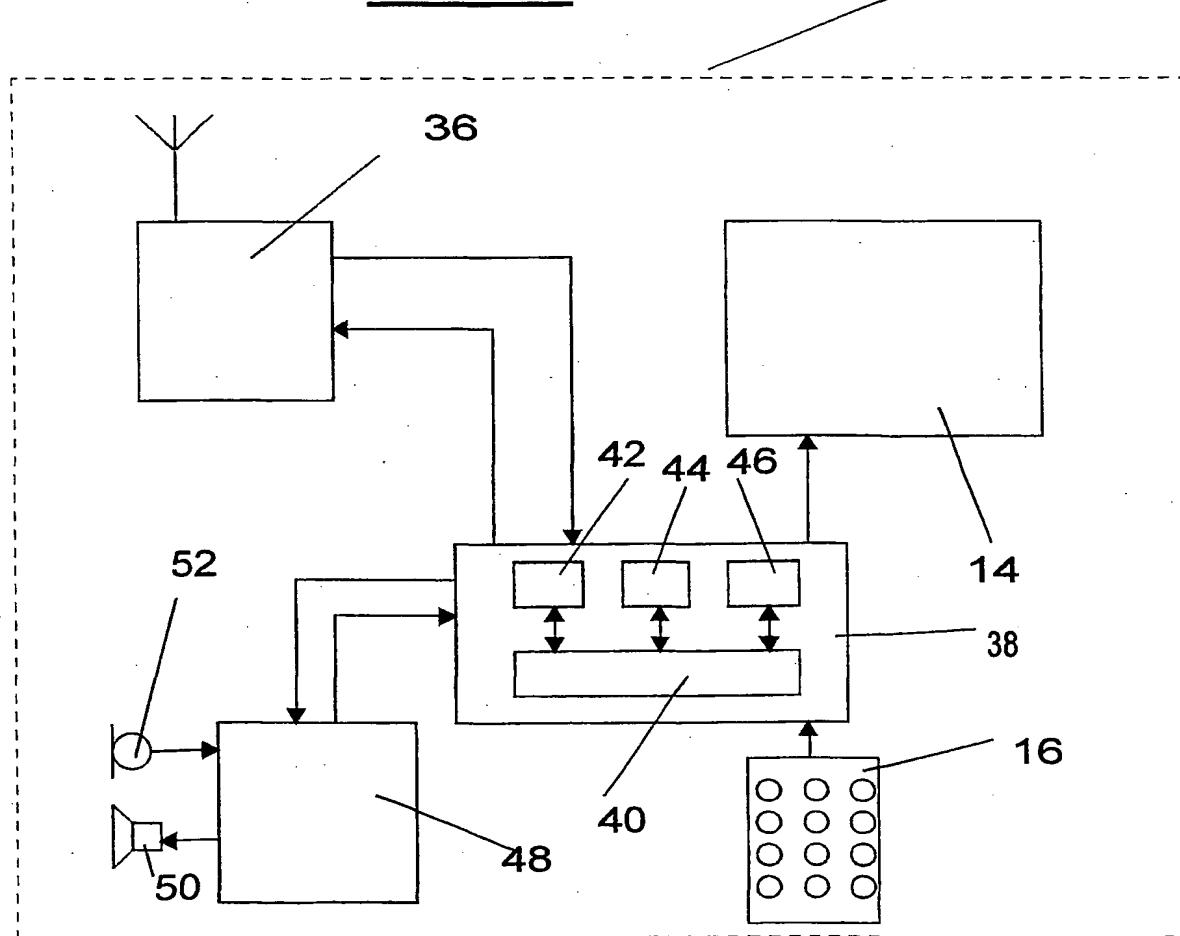
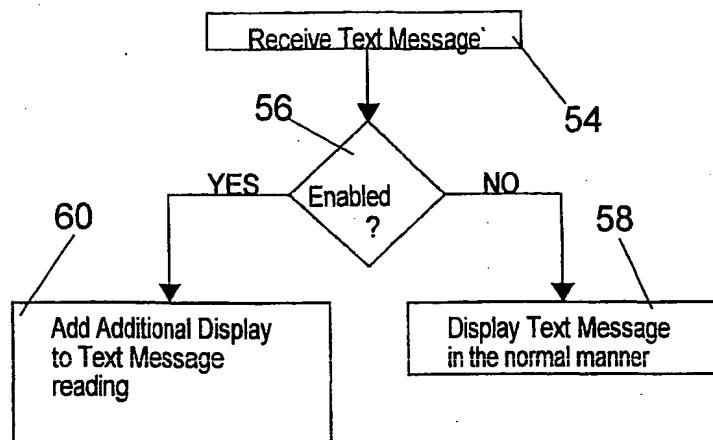
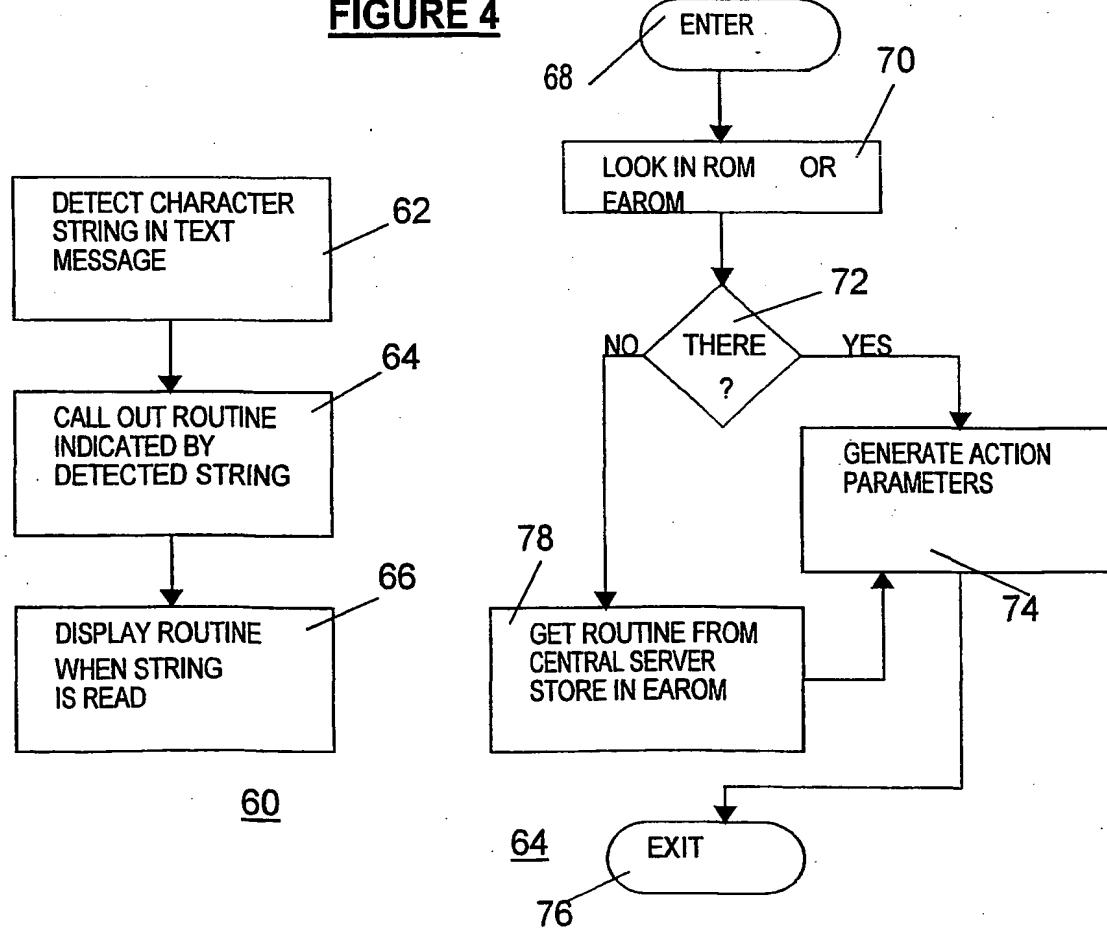


FIGURE 3

**FIGURE 4****FIGURE 5****FIGURE 6**

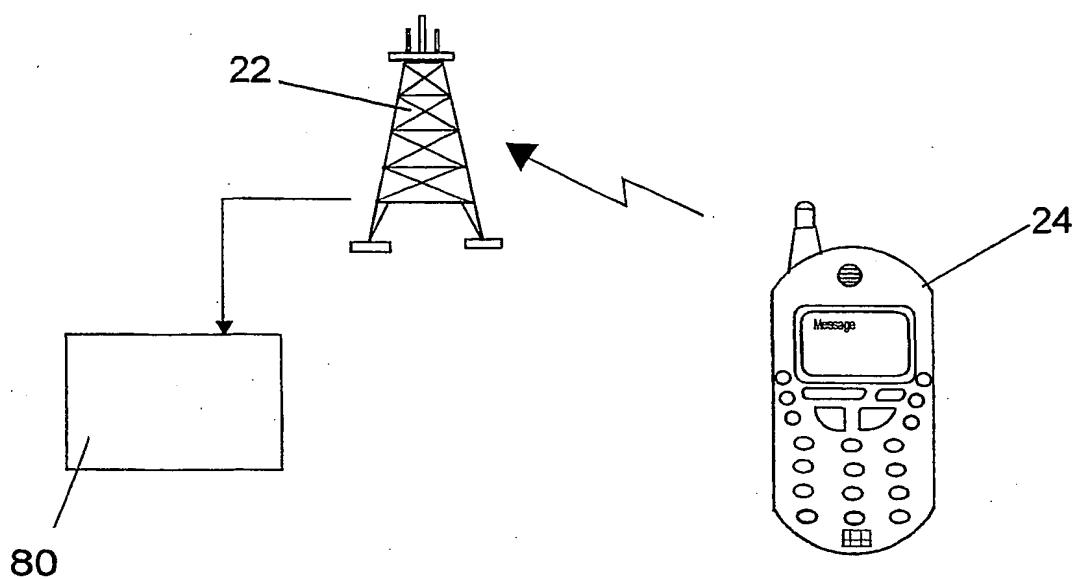


FIGURE 7A

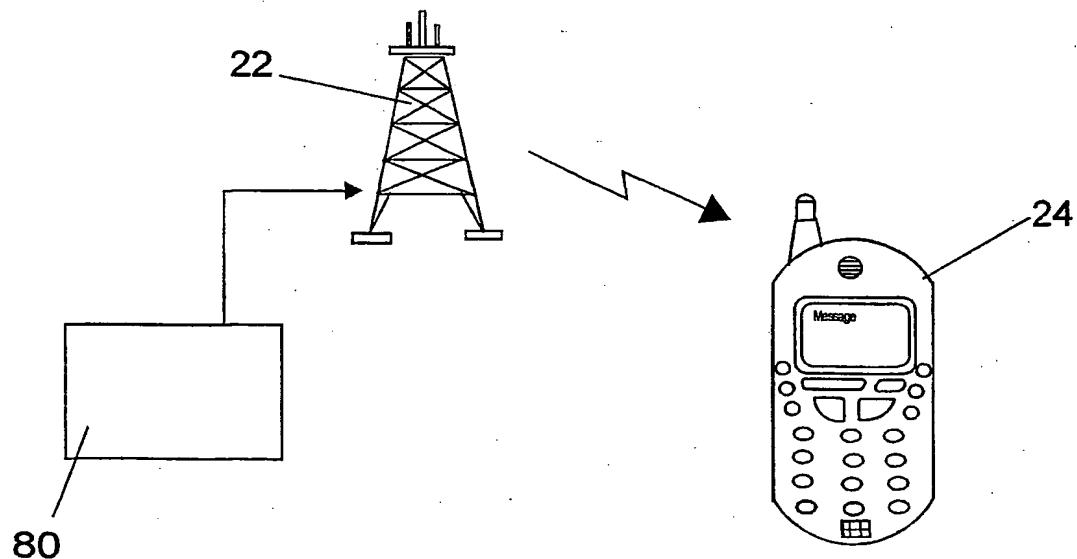
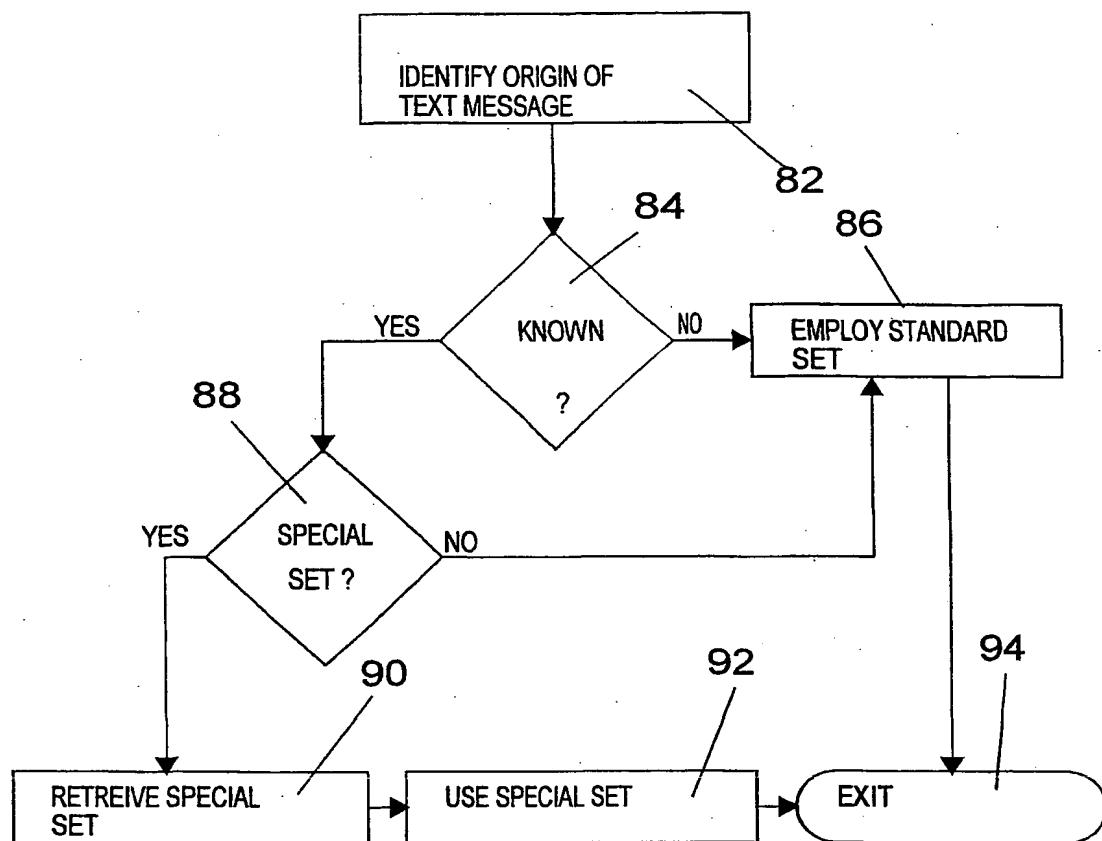
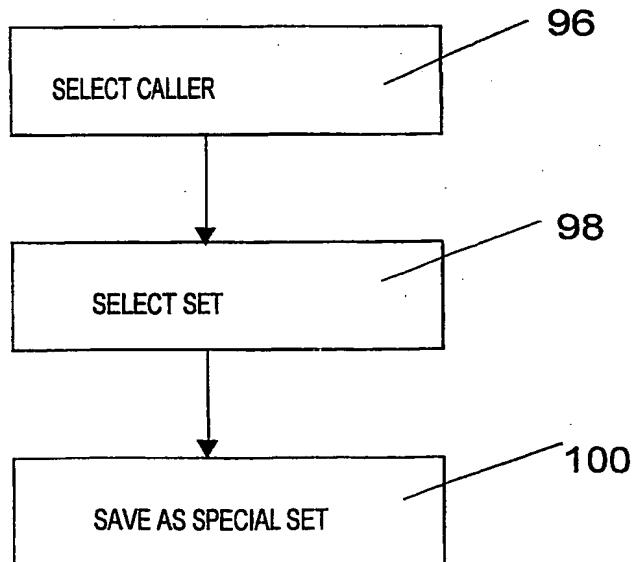


FIGURE 7B

**FIGURE 8****FIGURE 9**

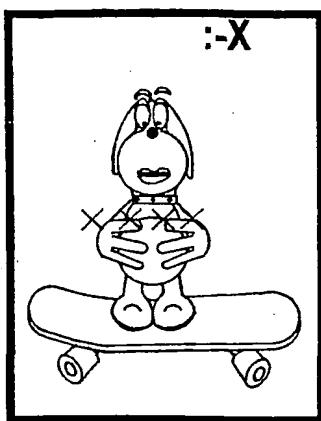


FIGURE 10A

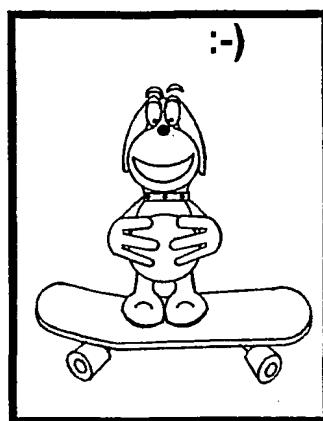


FIGURE 10B

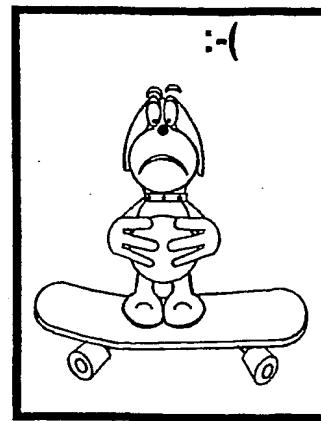


FIGURE 10C

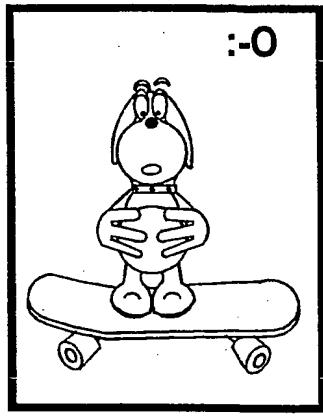


FIGURE 10D

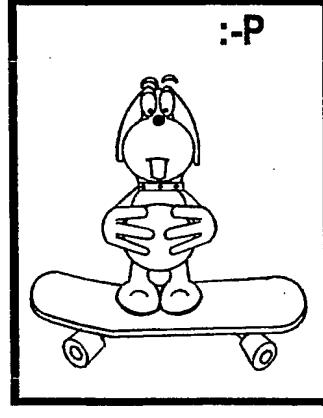


FIGURE 10E

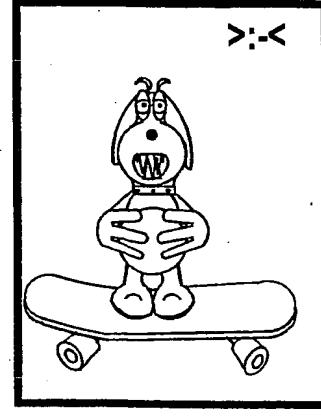


FIGURE 10F

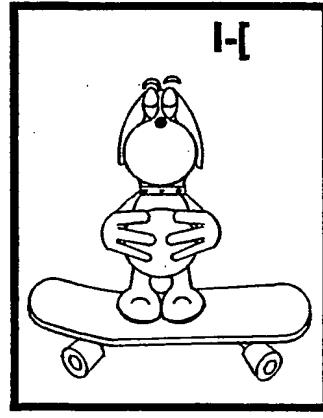


FIGURE 10G

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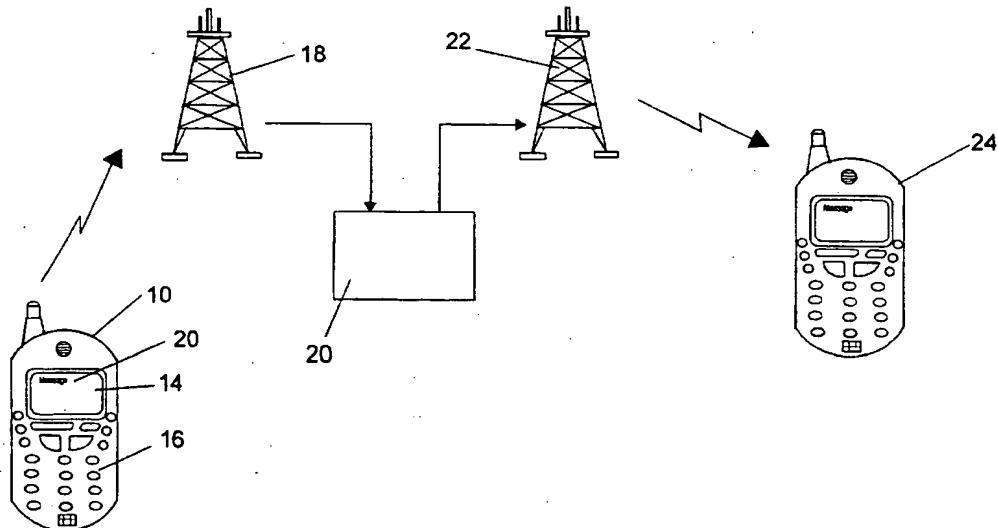
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[Continued on next page]

(54) Title: IMPROVEMENTS IN MESSAGE DISPLAY



WO 02/100121 A3

(57) Abstract: A mobile radio handset (10, 24), capable of receiving short message service text messages (12), examines incoming text messages (12) to see if a recognised string of one or more characters is received and, in response thereto, retrieves and displays, on a display screen (14), a stored image (26, 28, 30, 32, 34) which is to be displayed whenever that string of characters is received. The image (26, 28, 30, 32, 34) can be shown alone or with the text (12) which triggered its display. The images (26, 28, 30, 32, 34) can be provided by the user of the handset (24), or derived from a server or central data base (80) in the mobile telephone network. The images (26, 28, 30, 32, 34) can include static images or animations. The static images can include a photograph. As well as text messages (12), the Caller Location Identifier (CLI) of a caller can be used to evoke a display, chosen by the call recipient. The operation of the invention is compatible with handsets (10, 24) which can receive text messages (12) but which are not enabled for the invention.



(88) Date of publication of the international search report:

24 April 2003

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 02/02490

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04Q7/22 H04M1/725 H04Q7/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04Q H04M H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 784 001 A (BATEY JR CHARLES EDWARD ET AL) 21 July 1998 (1998-07-21) column 2, line 18 -column 3, line 37; figures 1,2 ---	1,4-7, 19,24, 25, 28-31, 43,48
X	US 6 044 248 A (SUZUKI TAKAHIRO ET AL) 28 March 2000 (2000-03-28) abstract column 4, line 37 -column 6, line 6; figures 3-5 column 7, line 51-67 ---	1,5-8, 19,24, 25, 29-32, 43,48

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed Invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed Invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Date of the actual completion of the International search

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 02/02490

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 348 082 A (NOKIA MOBILE PHONES LTD) 20 September 2000 (2000-09-20) page 6, line 1-30 page 10, line 3-24	1,7,8, 19,20, 24,25, 31,32, 43,44,48

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB 02/02490

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.: 2, 3, 11-18, 21-23, 26, 27, 35-42, 45-47 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 2,3,11-18,21-23,26,27,35-42,45-47

In view of the wording of the claims presently on file, which render it difficult, if not impossible, to determine the matter for which protection is sought, the present application fails to comply with the clarity and conciseness requirements of Article 6 PCT (see also Rule 6.1(a) PCT) to such an extent that a meaningful search is impossible. Consequently, the search has been carried out for those parts of the application which do appear to be clear, namely :

A method for displaying a text message in a mobile communication device, said method including the steps of : identifying one or more consecutive characters in the text message string; employing said one or more consecutive characters to identify an item to be displayed, and calling up and displaying the item in response to presentation of said one or more consecutive characters. (See description, page 2, lines 9-14).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 02/02490

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5784001	A	21-07-1998	WO	9719429 A1		29-05-1997
US 6044248	A	28-03-2000	JP	2818570 B2		30-10-1998
			JP	9182125 A		11-07-1997
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